Table 8B
Validated Soil Analytical Results Summary Table - TAL Metals
Niagara Falls Boulevard Radiological Site
Niagara Falls Boulevard, Niagara Falls, New York
August 2015

	Location No.	N001-SS001		N001-SS002		N001-SS003		N001-SS004		N001-SS005		N001-SS006		N001-SS007		N002-SS001		N002-SS002		N002-SS003	
	RST 3 Sample No.	**N001-SS001-1224-01**		**N001-SS002-1224-01**		**N001-SS003-0012-01**		**N001-SS004-0012-01**		**N001-SS005-1830-01**		**N001-SS006-0012-01**		**N001-SS007-0012-01**		**N002-SS001-0012-01**		**N002-SS002-0012-01**		**N002-SS003-0012-01**	
	Sample Depth (inches)	12 - 24		12 - 24		0 - 12		0 - 12		18 - 30		0 - 12		0 - 12		0 - 12		0 - 12		0 - 12	
	Sample Matrix	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
	Sample Result	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier
TAL Metal	**[1]EPA RML**																				
Aluminum	230,000	12,000		11,000		12,000		11,000		12,000		5,500		14,000		15,000		12,000		17,000	
Antimony	94	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Arsenic	68	ND		3.6	J	ND		ND		4.0	J	ND		3.0	J	24	J	ND		3.1	J
Barium	46,000	81		120		99		91		130		350		4,300		1,400		210		150	
Beryllium	470	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Cadmium	210	0.47	J	ND		ND		ND		ND		8.2	J	ND		ND		0.68	J	ND	
Calcium	NS	54,000	J	61,000	J	ND		14,000	J	27,000	J	150,000		44,000		95,000	J	35,000	J	ND	
Chromium	NS	1,300		54		25		23		25		49		72		210		53		23	
Cobalt	70	10	J	9.1	J	9.0	J	8.8	J	12	J	6.8	J	10	J	20	J	9.6	J	11	J
Copper	9,400	ND		230	J	ND		ND		ND		130		24	J	ND		ND		ND	
Iron	160,000	14,000		19,000		18,000		17,000		28,000		16,000		18,000		17,000		20,000		23,000	
Lead	400	45		68		30		29		35		110		50		22	J	77		18	
Magnesium	NS	17,000	J	21,000	J	5,300	J	5,800	J	9,700	J	51,000		12,000		29,000	J	10,000	J	4,800	J
Manganese	5,500	520		640		280		270		400		790		5,500		25,000		1,000		420	
Nickel	4,600	21	J	21	J	23	J	21	J	28	J	30	J	25	J	42	J	24	J	24	J
Potassium	NS	ND		1,000	J	910	J	1,100	J	1,400	J	ND		2,600	J	ND		1,200	J	1,000	J
Selenium	1,200	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Silver	1,200	ND		ND		ND		ND		ND		4.4	J	ND		ND		ND		ND	
Sodium	NS	ND		ND		ND		ND		ND		190	J	280	J	ND		ND		ND	
Thallium	2.3	ND		ND		ND		ND		ND		ND		ND		ND		ND		2.7	J
Vanadium	1,200	30	J	27	J	20	J	16	J	21	J	15	J	15	J	ND		19	J	32	J
Zinc	70,000	ND		ND		ND		ND		ND		550		110		ND		ND		ND	
Mercury	28	0.32		0.14		0.12		0.19		0.037		1.3		0.12		ND		0.031	J	0.055	

	Location No.	N002-SS004		N002-SS005		N002-SS006		N002-TRENCH		N003-SS001		N003-SS002		N003-SS003		N003-SS003		Rinsate Blank		Rinsate Blank	
	RST 3 Sample No.	**N002-SS004-0012-01**		**N002-SS005-0012-01**		**N002-SS006-2436-01**		**N002-TRENCH-0003-01**		**N003-SS001-1022-01**		**N003-SS002-2436-01**		**N003-SS003-1224-01**		**N003-SS003-1224-02****		**RB-N-150811**		**RB-N-150812**	
	Sample Depth (inches)	0 - 12		0 - 12		24 - 36		0 - 36		10 - 22		24 - 36		12 - 24		12 - 24		NA		NA	
	Sample Matrix	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Aqueous		Aqueous	
	Sample Result	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (mg/kg)	Qualifier	Value (µg/L)	Qualifier	Value (µg/L)	Qualifier
TAL Metal	**[1]EPA RML**																				
Aluminum	230,000	16,000		15,000		13,000		4,800		7,900		11,000		13,000		12,000		ND		ND	
Antimony	94	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Arsenic	68	ND		ND		3.4	J	ND		4.5	J	2.4	J	3.3	J	2.4	J	ND		ND	
Barium	46,000	130		56		92		320		110		100		150	J	96		18	J	ND	
Beryllium	470	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Cadmium	210	ND		ND		ND		19	J	ND		ND		0.57	J	ND		ND		60	J
Calcium	NS	9,100	J	ND		50,000	J	32,000		57,000	J	66,000	J	44,000	J	54,000	J	8,000		ND	
Chromium	NS	25		20		20		280		970		18		860	J	790		ND		ND	
Cobalt	70	13	J	6.9	J	12	J	16	J	16	J	8.7	J	11	J	11	J	ND		ND	
Copper	9,400	ND		ND		ND		520		ND		ND		ND		ND		140		ND	
Iron	160,000	25,000		19,000		24,000		180,000		14,000		19,000		19,000		19,000		19	J	ND	
Lead	400	37		12		14		1,300		37		22		64		62		ND		ND	
Magnesium	NS	6,100	J	3,600	J	6,800	J	13,000		30,000		17,000	J	17,000	J	21,000		2,100		ND	
Manganese	5,500	510		110		340		1,400		2,500		1,900		1,300	J	560	J	1.6	J	ND	
Nickel	4,600	27	J	18	J	28	J	270		39	J	18	J	25	J	25	J	ND		ND	
Potassium	NS	1,100	J	ND		920	J	ND		ND		1,300	J	1,100	J	1,100	J	800	J	ND	
Selenium	1,200	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Silver	1,200	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Sodium	NS	ND		ND		ND		1,600	J	ND		ND		ND		ND		16,000		ND	
Thallium	2.3	ND		ND		2.1	J	ND		ND		ND		ND		ND		ND		ND	
Vanadium	1,200	24	J	26	J	30	J	ND		18	J	19	J	29	J	29	J	ND		ND	
Zinc	70,000	440	J	ND		ND		760		ND		ND		270	J	ND		280		ND	
Mercury	28	0.28		0.036		0.033	J	1.7		0.15		0.019	J	0.19	J	0.078	J	ND		ND	

Notes:

TAL - Target Analyte List

RST 3 - Removal Support Team 3

No. - Number; NS - Not Specified; ND - Not detected

Background sampling location.

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

mg/kg - milligram per kilogram, µg/L - microgram per liter.

[1]U.S. Environmental Protection Agency (EPA) Removal Management Levels (RML) for Residential Soil corresponds to either a 10-4 risk level for carcinogens or a hazard quotient (HQ) of 3 for non-carcinogens (published July 2015)

Values in red highlighted in yellow equal or exceed the EPA RML.

EPA RML values are presented in mg/kg

N003-SS003-1224-02 is a duplicate of N003-SS003-1224-01**